

## AMENDMENTS TO THE SPECIFICATION

1. Please amend paragraph [0035] as follows:

**[0035]** At the same time, the phase signal PM2 is also applied to the phase offset **523** for the fractional-N PLL modulation **500** that is used to track the carrier frequency of VCO **521**. In operation, a modulated signal from the loop filter **517** is coupled to the adder **519** such that the VCO **521** operates with two signals. By using the feed-forward phase modulation through the D/A converter **513**, a change in the phase gain value will result in an equivalent change in the modulation gain of VCO **521**. Thus, the nonlinear effect of VCO gain drift can be adaptively compensated by predistorting the scaling value of the phase gain **511**. Also, a controller **524** receives the phase-modulated baseband signal and the carrier frequency signal to produce a digital bit stream used to control a reference frequency coupled to an input of the phase detector **515**.

2. Please amend paragraph [0047] as follows:

**[0047]** At **608**, the two predistorted signals are equalized with respect to one or more common parameters. As the two signals eventually go through two different paths to control a ~~switching-mode~~ switching-mode power amplifier and result in a time shift, as shown in FIG. 5, a time delay between the two predistorted signals ~~are~~ is equalized to compensate for such a time shift. Accordingly, the one or more common parameters that are used at **608** are also updated, adjusted or corrected by the feedback loop operating on a sample of the final RF signals.